



# **BADGER STATE** **Smoke Signals**



**Serving Amateur Radio in Wisconsin**

**Published Monthly Since 1969**

Vol. 17 No. 6 - 198th Consecutive Monthly Issue - Baraboo, Wis. - June 1986



Roy Neal, K6DUE

## **K6DUE: Ham of the Year**

Roy Neal, K6DUE, was named 1986 Radio Amateur of the Year by the Dayton Amateur Radio Association (sponsors of the Dayton Hamvention.)

Neal, currently the West Coast Deputy Bureau Chief at NBC Network News, was named to receive this most prestigious award for his many years of personal and public dedication to the Amateur Radio Service.

Specifically cited by the DARA Awards Committee was the key role he played in initiating the "Manned Amateur Radio in Space Program." This led to highly successful in-flight Amateur Radio demonstrations performed by Dr. Owen Garriott, W5LFL, during STS-9 in 1983 and by Dr. Anthony England, WØRE, on mission 51-F in 1985.

Neal also drew praise for his willingness as an internationally-recognized public figure to use his position to help promote interest and growth in the Amateur Service. This was accomplished through his production of

(Continued on page 8)

Badger State Smoke Signals supports: The American Radio Relay League (ARRL) - The Wisconsin Nets Association (WNA) - The Wisconsin Association of Repeaters (WAR) - The Amateur Radio News Service (ARNS) - The Courage Handi-Ham System - The Morse Telegraph Club - GEARVAKI (The 'f' is silent)

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Ken Ebner, K9EN, Chairman  
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SWAPFESTS AND OTHER SOCIAL EVENTS

Amateur Fair, St. Paul, MN. This years event will run two days, June 7th and 8th.

The Central Wisconsin Radio Amateurs, Ltd. Stevens Point Swapfest and Family Picnic will be held Sunday, June 15, 1986. (See the flyer with last issue.)

June 8, 1986 - Santa Fe Park, IL - Hamfest - Sponsored by the Six Meter Club.

June 28-29 -- FIELD DAY 1986

The 1986 South Milwaukee Swapfest will be held on July 12, 1986. (See the flyer enclosed with this issue)

The 3rd annual Eau Claire Hamfest, sponsored by the Eau Claire ARC will be held on July 12, 1986, 8:00 am to 4:00 pm at the 4H building on Fairfax St. Admission: \$3.00 at the door. Free tables for Hams, Free coffee, commercial exhibitors, food, etc. Talk in on 146.52.

Sunday, July 27, 1986. The Belvidere Hamfest. Boone County Fairgrounds, Route 78, Belvidere, IL. Contact Jim Grimsby, W9HRF, 210 Oaklawn Ln. Poplar Grove, IL 61065

Saturday, August 16, 1986. The Green Bay Mike & Key Club's will be held at the Community Center behind St. Mary's Hospital (on Dousman St.) in Green Bay.

September 5, 6 & 7. ARRL National Convention, San Diego. See QST for details.

September 20, 1986 -- The 1986 WNA Picnic.

Sunday October 12, 1986 -- The KMRA Swapfest in Waukesha, WI. KMRA, P.O. Box 411, Waukesha, WI 53187.

October 18-19. ARRL Central Division Convention, St. Charles, IL.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas.

Send information on your event to Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages, and/or we can include your flyers. For information on rates and requirements for our advertising pages, and/or for including flyers, please contact K9ZZ or K9EN.

CLUB MEETINGS:Badger Amateur Radio Society

(W9YT - University of Wisconsin - Madison)

Regular monthly meetings are held at 7:30 PM on the 2nd Wednesday of every month while school is in session, in B314 Electrical Engineering Building.

Central Wisconsin Radio Amateurs, Ltd.

(Stevens Point)

Regular club meetings are held on the second Wednesday of the month.

Eau Claire A.R.C.

The Eau Claire Amateur Radio Club meets every second Tuesday of the month. Hams and guests are welcome.

Four Lakes A.R.C. (Madison WI)

RED CROSS BUILDING, 4860 Sheboygan Ave, Madison, WI., first and third Tuesday each month.

Green Fox Amateur Radio Club

Meetings are held the third Monday of the month at 7:30 p.m. at the Green Lake Town Hall located at the intersection of county highways K and N.

Kettle Moraine Radio Amateurs:

All meetings are held on the SECOND (2nd) Friday of each month.

Manitowoc County Radio Amateurs

MANCOURAD meets on the third Wednesday of the month at 7:30 p.m. at Manitowoc Red Cross at 20th and Washington Streets in Manitowoc WI.

Milwaukee Radio Amateurs Club:

All regular meetings of MRAC scheduled for 1986 at Wauwatosa Savings and Loan Building, 7500 West State Street, will be held on the second Thursday of the month.

Ozaukee Radio Club

Meetings held every second Wednesday at 7:30 p.m. in the Saukville Community Center

Riverland Amateur Radio Club

Regular meetings are held at 7:30 P.M., on the first Wednesday of each month in the Onalaska Community Center in Onalaska, WI.

South Milwaukee Amateur Radio Club

Meetings held at Legion Post 434, Shepard Ave., Oak Creek, on first Wednesday of the month. Auctions held at March and October meetings.

West Allis Radio Amateurs Club

Regular meetings are held on the second Tuesday of each month at St. Francis Savings, 9330 W. Greenfield Ave., at 8:00 P.M.

The Wisconsin Valley Radio Association. (Wausau)

Holds regular monthly meetings on the first Tuesday of the month at 7:30 p.m. The location varies, but information is available on the 146.04/64 repeater in Wausau.

Yellow Thunder Amateur Radio Club:

(Baraboo, WI)

All regular meetings of YTARC are at the Baraboo Civic Center. Meetings start at 7:30 P.M.

The meeting dates for 1986 are: June 10, in room 25, July 16, in room 29, Aug. 14, in room 29, Sep. 15, in room 25, Oct. 14, in room 25, Nov. 12, in room 29, & Dec. 11 in room 29.

Let us know of your club meeting dates, and we will let others know of your meetings and activities. There may be Amateurs in your area interested in joining your club, or members of other clubs interested in making an interclub visit.

MISCELLANEOUS MISCELLANEOUS MISCELLANEOUS MISCELLANEOUS  
Oh what the heck -- items of interest:

Oshkosh Amateur Radio Club, Inc.THE INTERCOM

Congratulations are in order for KA9LQD, Steve, who passed his advanced, and to KA9UNE, Dennis, and KA9UNF, Jim, on obtaining their technician licenses.

Taylor County Area Amateur Radio ClubTaylor County ARES

Congratulations to New Novices:

Vangel Hartwig	Omega	KA9UXX
Jody Campbell	Omega	KA9UXM
Louis Young	Colby	KA9UXN
Tom Hrdina	Medford	KA9UXV
Lee Markow	Medford	KA9UYB

Our thanks to the above mentioned clubs and their bulletins for the information presented. Badger State Smoke Signals will be pleased to exchange bulletins and information with your club. Please contact K9ZZ or K9EN.

For my birthday, I got a lifetime, waterproof, shock-proof watch. -- I lost it.

THE TEST POINT

The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area.

June 7, 1986	Milwaukee, WI
June 7, 1986	St. Paul, MN
June 15, 1986	Stevens Point, WI
June 21, 1986	Appleton, WI
June 21, 1986	Park Falls, WI
July 12, 1986	South Milwaukee, WI
July 19, 1986	Minneapolis, MN
August 16, 1986	Waukesha, WI
August 16, 1986	Robbinsdale, MN
September 20, 1986	Waukesha, WI
September 20, 1986	St. Paul, MN
October 18, 1986	Minneapolis, MN
November 1, 1986	Stevens Point, WI
November 15, 1986	Robbinsdale, MN
December 13, 1986	St. Paul, MN
Third Sat. Monthly	Loves Park, IL

General rules for all examinations:

All examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs may permit walk-ins. Check with sponsor to find out if they allow walk-ins.)

To register for these examinations, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from the FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 22¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group. Remember-- you must file at least 30 days in advance unless otherwise indicated.

ARRL/VEC examinations require a check for \$4.25 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. As in the past, a copy of your license must be attached to your FCC form 610.

Additional information is given below.

MILWAUKEE METRO AREA TEST TEAM. - (MRAC VEC)

Saturday June 7, 1986

In room 256 at the Wauwatosa East High School, 74th and Milwaukee Ave. Use the East (74th Street) entrance.

File on a Postal System post card (14d) mailed to:

The Milwaukee Radio Amateurs' Club, Inc  
N50 W16328 Pin Oak Court  
Menomonee Falls, WI 53012

PLEASE PRINT listing the grade of license you are applying for, your name, address, including Zip Code and your telephone number.

MRAC -- Your Wisconsin based VEC for Region 9.

June 15, 1986 Stevens Point, WI  
November 1, 1986 Stevens Point, WI

Central Wisconsin Radio Amateurs, Ltd. - (ARRL/VEC)

Contact: Joe Larson N9JW  
644 Portage Street  
Stevens Point WI 54481

Saturday, June 21, 1986

Sponsored by the Flambeau Amateur Radio Club.  
(ARRL/VEC)

Contact:

Tom Korth, KW9H or Art Dunham, NC9B  
c/o Radio Station WNBI 656 South 7th Ave.  
Park Falls, WI 54552 Park Falls, WI 54552  
715-762-3221 715-762-4948

Walkins will be permitted as long as material lasts.

Saturday June 21, 1986

Appleton WI. (ARRL/VEC)

Contact: Larry Siebes, KD9IA  
1005 S. East St., Apt. #111  
Appleton, WI 54915

MILWAUKEE VOLUNTEER CORE GROUP - (DEVRY VEC)

July 12, 1986 - At Swapfest 86 (South Milwaukee)

June 21, 1986, August 16, 1986, September 20, 1986:

The MVCG will be giving Amateur Radio exams in the Service Occupation Building in rooms S0208 and S0209 at the Waukesha County Technical Institute on the above dates. Exam fee is \$4.00. Walkins welcome. Free coffee at WCTI only. Exams begin at 9:00 a.m. All exams available in Braille, large type, and on cassette tape for visually impaired. Bring your original Amateur license. If interested, please send a post card with your name, address, phone number, date of test session, and grade of license you wish to achieve, to Syl Janczak, WD9JKZ, 3127A West Madison, Milwaukee WI 53215.

Note: All exams are available in Braille, large type, and on cassette tape for the visually impaired. Exams for shutins by appointment only.

Third Saturday of every month.

Northern Illinois Volunteer Examiners (Devry VEC).  
Held at North Suburban Library on North Second Street  
in Loves Park, IL.

Contact:

Gene Melton, AK9N  
124 S. Chicago Ave. #2  
Rockford, IL  
(815) 229-7249

Minnesota tests - contact information:

Gopher/Minneapolis ARC:

Fred Hird  
4716 Emerson Ave. S.  
Minneapolis, MN 55409  
824-7702

Robbinsdale ARC:

Neil McMillan  
11132 97th Place  
Minneapolis, MN 55369  
(424-6248)

St. Paul ARC:

Jay Bellows  
997 Portland Ave.  
St. Paul, MN 55104  
222-7253 (home) - 291-8015 (work)

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules.

Please send us your schedules of dates, times, and locations that you will be conducting examinations, and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN or K9ZZ at the address shown on page 2.

GOVERNOR QSOs THREE ON 75 SSB - AND QSLs

By Richard Regent K9GDF

The Governor's Conference on Emergency Management was held on the fifth floor of the Marc Plaza in downtown Milwaukee on April 17th. KC9CJ operated a 75-meter SSB Setup. W9FZC worked stations on two meter FM, and WB9NYG put red circle stickers on the 75 and 2 meter Wisconsin maps to confirm QSOs in 58 counties; he also helped to operate.

As I arrived, Governor Tony Earl was leaning over the equipment table near the 75 meter station, busily autographing QSL cards for contacts he had just finished making. Among the lucky Amateurs to QSO the Governor were KA9RII, WB9DHE, and KC9XH; they were thanked for the outstanding quality of help that Wisconsin Amateur Radio operators give to the government in emergencies and bad weather situations. KC9CJ kept the receiver properly tuned so the Governor could hear every word; Dick has provided clear reception for the past three Governors (Lucey, Dreyfus, and now Earl.)

KA9RII, Lisa, later confessed that she was a bit nervous when talking with the Governor and was concerned about the poor band conditions and QRN. WB9DHE, in a wheelchair, and KC9XH, a blind Amateur, were particularly pleased that Ham Radio afforded them a convenient opportunity to talk to the Governor.

As time quickly passed, the Governor compared last year's and this year's QSO maps, noted a picture of himself on one of them, shook hands with everyone, and then moved quietly on to handle more of his busy schedule.

It was now noon, and KC9CJ, still using the RACES call MC9AAG, took over as NCS to start the Badger Emergency Net, and handled several messages.  
(continued on page 5)





# YELLOW THUNDER A.R.C.

The May 19, 1986 meeting of the Yellow Thunder Amateur Radio Club, Inc. was called to order by the President, Art Kleefisch, W9WSS in room 29 of the Baraboo Civic Center.

The following members were present.

Art Kleefisch, W9WSS	Baraboo, WI
Ken Luneter, K9EN	Portage, WI
Jim Decker, WB9UQT	Baraboo, WI
Harold Reif	Baraboo, WI
Peter Sweeney, WD9JIB	Reedsburg, WI
Harry Mayland, K9FFT	Baraboo, WI
Harry Westlund, K9EHJ	Baraboo, WI
Steve Schwoegler, WB9RNL	Wisconsin Dells, WI

The Minutes of the March meeting were approved as printed in Badger State Smoke Signals. The Treasurer's report was presented by the Treasurer, Jim Decker, WB9UQT. The present balance in all accounts is \$323.19.

Communications and announcements: Ken, K9EN read a few items from The ARRL Letter and Westlink Report. Communications were read concerning the need for communications on some upcoming parades and Hands Across America.

It was announced that 2 students from the Novice class have received their licenses. Congratulations from the club to Sandy Hemmer, KA9VFW and Jon Nelson, KA9VIK.

Steve Schwoegler, WB9RNL was accepted as a VTARC member. Steve is a former member.

Old Business: The Executive Committee will continue to look for a suitable frequency counter to add to the club's equipment available for loan to members.

New Business: Discussion of club's Field Day plans for June 28 & 29. Final plans will be made at the next meeting.

Since Duane Grotophorst, WA9HKL is unable to continue as Vice-President due to attending school in South Dakota, Peter Sweeney, WD9JIB, was appointed by the President to serve as Vice-President/Activities Chairman.

Buck Night: Maurey, Gurgel, KA9TBU won the drawing for \$2.00. Since he was absent, the prize will be \$3.00 next month.

The meeting was adjourned by the President.

Respectfully Submitted, Ken Ebnetter, K9EN, Secretary

## VTARC BIRTHDAY:

Steve Schwoegler	WB9RNL	May	29
Ken Ebnetter	K9EN	June	8
Harold Reif		June	18
Harry Mayland	K9FFT	June	24

## SENTENCE SERMON:

We have committed the Golden Rule to memory; let us now commit it to life.

-- Edwin Markham

## Governor QSOs 3

(continued from page 4)

The stations and antennas were assembled and installed in about six hours, with operating during Governor's Day and takedown requiring another 11 hours. It wasn't until after the event that the two meter antenna, perched on the letter "M" of the Marc Plaza sign high up on the side of the building, was discovered to have a bad connection somewhere in its 300-foot length, and was the reason for a reduction in 2-meter range and number of contacts.

Special thanks to all who helped with their patience, time, and effort to make this event successful.

## FREE SATELLITE ISN'T FREE

From The ARRL Letter

There is a story circulating in the Amateur Radio press that NASA is looking for Amateur Radio operators who wish to experiment with a geostationary satellite which will be launched in Mid-1989.

The story goes on to say that Amateurs who are approved by NASA will be granted two years of free access to the satellite, and invites amateur to submit an "expression of intent" letter to NASA detailing what use they would make of their allotted satellite time.

No quite so! ARRL HQ called NASA concerning this story, where we were told that this free access was designed primarily for a handful of corporate users or individuals with corporate sponsors. To access the satellite, one will need a "time division multiple access terminal" (available only at a cost of over \$100,000), as well as other sophisticated equipment not normally available to individuals. A NASA representative said the agency is NOT looking for radio Amateur operators and doesn't understand why the Amateur press thought so.

FOR SALE: TS530S w/500Hz CW filter, \$500.00. TS700SP w/WF07005, SP70, \$350.00. Drake TR22, \$75.00. 220MHz duplexer, \$150.00. Doug Smith, W9WI, 6832 Schroeder Rd, #30, Madison, WI, 53711.

WANTED: Your articles and/or photos for BSSS.. they're always welcome! Help us spread the news! Send 'em to K9ZZ, JNX!

An opportunist is a fellow who, when he finds himself in hot water, decides he needed a bath anyway.

---Elkhorn Independent

# THE GOVERNOR'S CONFERENCE ON EMERGENCY MANAGEMENT - AND WC9AAG

From Russ Fleming, WB9NYG  
State RACES Officer

Dick Hugi, KC9CJ, and I installed a 75-meter dipole and a 5/8 wave 2-meter antenna above the 26th floor of the (Marc Plaza) hotel (in Milwaukee) on Wednesday (April 17). This involved dropping two 300-foot coaxial cables to the roof of the fifth floor exhibit area and, subsequently, through the window to the operating table.

John LaBlonde, W9FZC, retired state employee from Elkhorn, brought his Azden 2-meter transceiver on Thursday morning. Dick furnished his Kenwood 430 transceiver, Heath antenna tuner, and other equipment for operating on 75 meters.

We started the exercise promptly at 8:00 a.m., requesting Amateur check-ins from as many counties as possible. The operation on 3985 KHz was excellent, considering the power loss of 300 feet of coaxial cable. However, John experienced considerable intermod from the many vertical antennas on top of the high buildings in the metro area. We were not able to access the Baraboo repeater on 28/88. This certainly reduced our 2-meter coverage. All repeaters within range were activated and we had other Amateurs bring up Baraboo and relayed check-ins throughout the day.

We handled several messages for the conference attendees. One message was sent to Fairbanks, Alaska, for the Buildings and Grounds Superintendent of the Veterans Home at King, whose daughter lives in Fairbanks. We also went to 20 meters as a demonstration and made one contact with a station in Milan, Italy.

Governor Tony Earl took the time to make three contacts on 75 meters. He first worked Tony Hagen, WB9OHE, in LaFarge, Vernon County. He talked to Lisa Harper, KA9RII, in Eau Claire. His final contact was with John Offerdahl, KC9XH, in Verona. He was very gracious and thanked the people monitoring the frequencies for participating in the exercise.

I would estimate several hundred Amateurs, their families, and neighbors heard the Governor on the air. He signed QSL confirmation cards and they were mailed to the individuals. Tape recordings of the Governor's contacts were made and will be replayed in many radio club meetings throughout the state.

# MORSE TELEGRAPH CLUB MEETS IN NORTH FREEDOM

The 1986 annual meeting of the Morse Telegraph Club was held at the Mid-Continent Railroad Museum in North Freedom on April 26, with the MW Chapter again participating on the national hookup by Western Union.

The wire was in very good operating condition on Friday the 25th, and KA9GNY, NØDJD and WØZTP had some good QSOs with W9YZE and N4HKS in Alton, Illinois, and Club President and Editor of Dots and Dashes, AD9E, Bill Dunbar, in Normal, Illinois, besides other chapters throughout the U.S.

21 members were present Saturday for activities, plus some guests.

Election of officers was held, re-electing Marc Deneen as President, Sid Vaughn as Secretary/Treasurer, and Honorary Vice President Rosella Bruns. Bob King was named Official Wire Chief. A catered dinner of swiss steak by Ralph and Joanne Pierce, served in a railroad dining car at the museum, was much enjoyed by all.

Although the wire went down some in quality on Saturday, everyone had a chance to get on and do a little chatting.

On Saturday, May 24, the chapter will re-enact the sending of Samuel F.B. Morse's first message, "What hath God wrought?", between the North Freedom Museum and the Strasburg, Pennsylvania, Railroad Museum.

This will be the 142nd anniversary of that event and on the exact date. The hookup will be by telephone and special polarized telephone converters to operate the telegraph instruments.

This event will be open to the public, and the Club will also have a closed Morse circuit operating between the Passenger Depot and Coach Shed giving Morse demonstrations and sending souvenir telegrams. This would be a good opportunity for you Hams to come and see what your "roots" look like.

73, Bob King, KA9GNY

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WANTED: Looking for solid-state or HeNe lasers, with or without power supplies. Also wanted, 45 rpm record "Battle of Gettysburg" by Fred Darian on Jaf label. Write or call Jim, K9ZZ, 301 1/2 7th Street, Baraboo WI 53913. (608) 356-4249.

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WANTED: Your articles and/or photos for BSSS.. they're always welcome! Help us spread the news! Send 'em to K9ZZ. TNX!

# Novice NPRM Published

Novice Statistics: Here are the total number of Novices by FCC fiscal year:

<u>1983</u>	<u>1984</u>	<u>1985</u>
86,781	80,461	76,337

Just look at these statistics! A loss of almost 10,000 Novices over this three-year period!

It has become apparent that the Novice license, as presently constituted, is not doing the job for which it is intended; to provide a training ground from which newly licensed Amateurs can develop radiocommunication skills.

Increasingly, it has become generally recognized that present Novice privileges are insufficiently attractive in motivating prospective Hams to join our ranks. Furthermore, these privileges are not attractive enough to encourage many who do have a Novice license to get on the air.

Concerned by these factors, the ARRL Board of Directors authorized a petition which was filed by the ARRL in June, 1985, requesting a major "enhancement" of Novice privileges.

The FCC, acting on this petition from the ARRL and several others, has now issued a Notice of Proposed Rulemaking (NPRM), PR 86-161. This is probably the most important FCC proposal of the 1980s. This NPRM very closely follows the Novice Enhancement requests by the ARRL! (For further background information, see "It Seems to Us," July 1985 QST and the May 23, 1985 issue of the ARRL Letter.

The following are the specific FCC proposals:

\* The 10-meter Novice band would be expanded 300 KHz from the present 28.1-28.2 MHz to 28.1-28.5 MHz. CW and Digital communications (e.g., RTTY, AMTOR, and packet) would be allowed in the 28.1-28.3 MHz subband, and SSB and CW emissions on 28.3-28.5 MHz at the present power limit of 200 watts.

\* The 1 1/4 meter band (220-225 MHz) would be added to Novice privileges, allowing all authorized emissions with a power of 25 watts. The Commission cautions, however, that there are several pending petitions for rulemaking requesting the use of this band

for other services. Until these petitions are resolved, the Commission cannot finalize any rulemakings permitting Novices on this band.

\* A portion of the 23 cm band, 1246 - 1260 MHz, would be added to Novice privileges, allowing them all authorized emissions with a power of 5 watts.

\* Novices will be able to operate through repeaters on the 220 MHz and 1240 MHz bands.

\* Novices would not be allowed to be a control operator or a licensee of a station which is in repeater, auxiliary or beacon operation.

Another important aspect of the FCC's proposal was their request for comments concerning the ARRL's request to expand the Novice examination to 30 questions and the Novice question pool to 300 questions. (The ARRL does not want to make the examination more difficult. We want to increase the comprehensiveness of the examination in order to accommodate the operational aspects of the additional privileges available to Novices.)

The ARRL also requested Section 97.28 be amended to require that each Novice examination be administered by two volunteer examiners holding General Class licenses or above, rather than the presently required one examiner, in order to maintain the integrity of the Novice examination.

A so-called "alternative" proposal would split the present Technician/General class written Element 3 into two different examinations: A VHF/UHF exam for Technicians and an HF exam for the General Class called Exam 3(B). Currently, if a Novice passes the 50 question Element 3 exam, he becomes a Technician and need only pass the 13-wpm code test for his General. Under this alternate proposal a Novice would need to pass a 25-question Element 3(A) (VHF/UHF) exam to receive his Technician class license, and to pass his General exam would need to pass a 25-question Element 3(B) (HF) exam and the 13 wpm code test.

Although the NPRM was released only 48 hours prior to the June QST being sent to the printers, a detailed story, plus the entire text of the NPRM, will appear in that issue.

Formal comments on this proposal are due on or before July 16, 1986. See June QST for more details.

(From the ARRL Letter, May 9, 1986)

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\* Send your Field Day photos to BSSS!

## K6DUE - Ham of the Year - Continued from front page

and his appearance in numerous films and video presentations promoting Ham Radio. These include "Moving up to Amateur Radio" (1975) and "The World of Amateur Radio" (1979) in association with Dave Bell, W6AQ; and "Amateur Radio's Newest Frontier - Pre-flight" (1983) and "Amateur Radio's Newest Frontier - Postflight" (1984) and "SAREX - The Shuttle Amateur Radio Experiment" (1985).

On these three latter videotapes, K6DUE served as executive producer, writer and narrator/host. Also noted was K6DUE's technical expertise in his early aeronautical mobile VHF experiments, his work on the initial development of the stub-tuned tri-band beam antenna and development of one of the earliest forms of scanning receivers.

(Thanx the Westlink Report.)

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The staff of Badger State Smoke Signals also congratulates Roy; he has earned the recognition, without question. Along with our congrats, we also send our thanks!

\*\*\*\*\*

## Propagation Predictions

By Woody Minar, K9EF  
13508 Tabscott Drive  
Chantilly VA 220121

Solar induced geomagnetic storms have many geophysical and biological effects. (\*) Among these are disruptions of radio communications and long distance electric power transmission, due to voltages induced in the ionosphere, on power cables, and in the ground.

Some species of homing pigeons seem to become disoriented during geomagnetic storms. Satellite orbits tend to decay and, because of ionized particle "build up" on the satellites, they tend to have signal loss and tripping of protective circuits.

Although not proven, weather patterns are thought to be affected by geomagnetic storms. One observer noted that on average, the growing season is longer near sunspot maximum than near sunspot minimum. The driest springs, summers, and autumns are associated with high solar activity and

abnormal winter and annual rainfall occur during quiet solar conditions. Additionally, the spin rate of the earth may be affected by solar activity and this may in turn affect earthquake activity.

The chart below shows expected effects of acute whole-body radiation doses (measured in rems) from geomagnetic storms:

0 - 60: No obvious effect, except possibly minor blood changes.

100 - 270: Vomiting for about one day in 5% to 50% of exposed people; fatigue, but no serious disability.

340 - 620: Vomiting and nausea in nearly all people on first day; up to 50% deaths within 1 month.

690 - 930: Vomiting in all people within four hours; up to 100% deaths.

1200: Vomiting in all people within 1 to 2 hours; probably no survivors.

6200: Incapacitation almost immediately; all people die within one week.

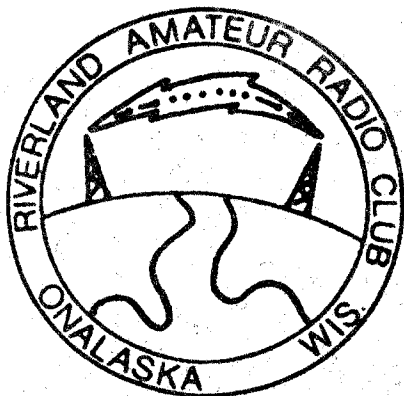
To put this into perspective, the Apollo crews could have faced death, even with space suit and lunar module shielding, had a major solar flare occurred during their flight. In commercial travel, the Royal Aircraft Establishment in Great Britain has tentatively prescribed either lower altitudes or evasive action of SST's during major geomagnetic storms. The dose rates for passengers could otherwise cause serious health problems.

April props improved somewhat over March. The latter half of May, however, is expected to be unsettled. Look for stormy conditions the last few days of the month. Basically, a good month to plant the garden - but wear a space suit.

May	13 - 15:	Good
	20 - 22:	Bad
	27 - 29:	Good
June	3 - 5:	Bad
	10 - 12:	Good
	17 - 19:	Bad

\* Statistics and data excerpted from NOAA Technical Report ERL 315-SEL 32, 1/75.





On May 7, 1986, at 7:44 p.m., the regular monthly meeting of the Riverland Amateur Radio Club was called to order by President Craig Goldbeck. Minutes of the April meeting were approved as read from the Badger State Smoke Signals. The Treasurer's report was approved.

37/97 Report: The committee reports that a timer has been installed on the battery charger to reduce overcharging. The backup power supply will now switch in instantly. It is estimated the battery mode would be good for approximately 8 hours without the amplifier.

RTTY Report: Currently there are some problems with the RTTY repeater which may be caused by the safety cables causing noise during high winds. Further work on this will be taking place.

VE Exam: Next exam will be June 25 at 7:00 p.m. at the Onalaska Community Center. If you have not made arrangements with Rick on taking an exam, please see him as soon as possible.

Swapfest Committee: The Swapfest Committee met shortly after the April meeting to discuss a proper course of action to accomplish the goals of the committee, which is to compile the needed information on having a larger swapfest in the La Crosse area. It was planned that the first information that be acquired would be the general feeling of local Amateurs on whether La Crosse should be the site of a larger swapfest. Several questions were drawn up and a telephone survey began. The results were very favorable for a larger swapfest.

The swapfest planned for 1986 will be July 26 at the Community Center.

Old Business: The chalk board the club donated to the Community Center has been presented to the Center and was on hand for all to see. A donation plaque will be permanently placed on the chalk board by Roger Reader. This board is for use by anyone who uses the Center.

New Business: There was a discussion on a location for Field Day. A motion was made

and seconded that we hold the activity at Al Hoffman's site north of Holman. The motion was passed. An invitation will be extended to the Winona ARC to join us with the Field Day at our site. All Field Day activities will be open to the public.

There was a discussion on holding classes for upgrading, at this time the Novice class is starting its 4th week, it would be too late at this time for anyone to get in. Another class can be planned for a later date.

It was noted that a letter of thanks was sent to our club from a local radio station for our help in tracking the Catbirds bus as it was arriving home from the playoff victory.

The meeting was adjourned at 8:16 p.m.

No program was planned.

Total members present was 25.

Respectfully submitted: Greg A. Miller, with the help of Rick Williams.

#### Members Present

Craig Goldbeck	N9ETD
Wid Johnson	W9DM
Ernie Gershon	K9ZVU
"Knut" Knutson	W9SFL
Bill Wood	WB9VYL
Art Osborn	WØJDC
Gary Webb	N19V
Tom O'Brien	WB9BJQ
Van Elston	WA9FIO
Duane Fruechte	W9HWQ
Bill Kleinschmidt	N9FDE
Bob Anderson	WAØVHO
Ray Wakeen	WA9HHM
Dallas Miller	K9LEC
Phillip Long	KA9RLI
Roger Reader	KA9BKK
Tom Tippiery	KAØATU
Herman Ludvik	W9HJV
Bob Colleran	W9JLH
John Young	W9KAZ
Ron Reed	KD9OY
Bob Pluntz	WD9FKV
Jack Yoshizumi	W9KTD
Rick Williams	KV9U
Charlie Burch	KA9UUK

#### Guests Present

Ted Barris - David Anderson - Al Hoffman	
Hank Oehmigen	KAØHWQ
Bernard C. Jeffries	KA9NUR
Rafael Uvibe	HK5GCK
(Guest from Colombia)	

## VARIOUS THINGS - FROM K9ZZ

Congrats to Wid Johnson, W9DM, and Lucy Lackore, NØCLS, who were cited by Minnesota Governor Rudy Perpich for their public service Ham Radio work. They were the subjects of a fine article in the Winona MN newspaper; take a bow, you two!

Frank Guth, W9BCC, Stevens Point, is wondering how all the ruckus started about the FCC's changing their rules about emergency traffic, and what is business and what isn't. When the FCC changed their rule, it became illegal for us to operate Skywarn nets. The rule has since been changed back to what it was. Seems the National Weather Service is considered by FCC to be a business, and, under the FCC's new interpretation, we couldn't serve them. However, someone's missing something somewhere, since the ultimate beneficiary of our reports is not a business - it is the general public! Oh well, it's been changed - again - and it's OK to help save lives and property.

If you and your club or group take to the Wisconsin wilds (or anywhere else) for Field Day, please send some photos to us. Black and white are much preferred, but we can use color pix if they are properly exposed and well focused. Send your pix to me at my address on page 2.

BSSS subscription rates will be going up slightly, starting in July. The new rates will be 1 year: \$7.50, two years: 13.50, and 3 years: 19.50. The increase is 50 cents per year. Club rates will also be going up a very modest amount.

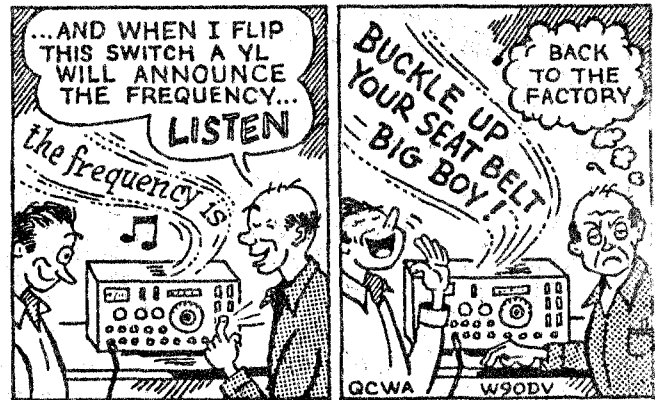


## San Diego '86

ARRL 1986 NATIONAL CONVENTION  
September 5, 6, and 7, 1986

Write Sybil Allbright, W6GIC, Registration  
Chairman, P.O. Box 82642, San Diego CA  
92138, or call (619) 292-7918 for information.

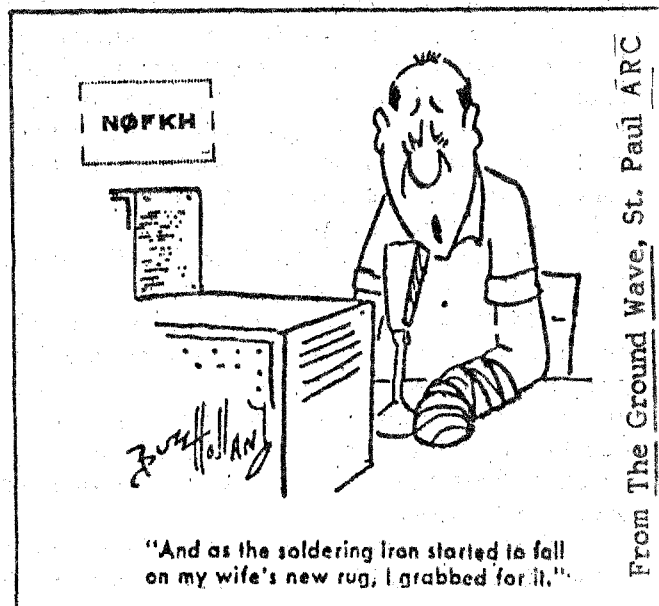
## NEW RIG



Your editor is on packet radio, with an MFJ-1270 TNC. However, I'm not on all the time, as the computer often has other things to do. If you call me on packet, go thru WA9SOU-2, and adding WB9UQT as the last digipeater sometimes helps. The TNC seems to work well; it was made in Hong Kong, but Oriental electrons flow the same as United States electrons do. The TNC uses current technology, you know. Which reminds me, when I have to put a new backup battery in the TNC, it will be a revolting situation, indeed.

Your editor is somewhat interested in a C-64 with a 1541 disk drive. A printer interface would be helpful, too. You got? Call (608) 356-4249. Thanx!

Our sincere thanx to all the volunteer authors and artists who have contributed articles, cartoons, crossword puzzles, etc. to our volunteer effort for Wisconsin Amateurs. You have helped us tremendously; without you, BSSS would not be the thriving paper it has become. Your work and help is deeply appreciated! Have a great summer, y'all! 73, Jim, K9ZZ.....



From The Ground Wave, St. Paul ARC



# EAU CLAIRE A.R.C.

The June meeting of the Eau Claire ARC will be held on June 10, 1988, 7:30 pm, at the Parks and Recreation Building on First at Oxford.

## \*\*\*\* EAU CLAIRE HAMFEST \*\*\*\*

The 3rd annual Eau Claire Hamfest, sponsored by the Eau Claire Amateur Radio Club will be held on July 12, 1988, from 8:00 am until 4:00 pm at the 4H Building on Fairfax St. in Eau Claire, WI.

The admission fee is \$3.00 at the door. There will be free tables for Hams and free coffee. There will also be food available, door prizes, and commercial exhibitors. Amateur license tests will be given. Talk in frequency will be 146.52 MHz.

The minutes of the Eau Claire ARC meeting did not arrive in time for printing with this issue of BSSS. We apologize for their absence and they will be printed in the July issue.

In their absence, we are including an old column from an early WNA Bulletin by Wid Johnson, W9DM, which we are sure you will enjoy.

## LINEAH AMPLIFIERS

Wid Johnson W9DM  
Dakota MN

(Originally run in WNA Bulletin, December, 1979)

Lineah Amplifiers? The mention o sich gadegets itches mah thinkin cap an brews up a right fine recalection o me granpappy.

Yas'a jess like lookin at one o them fangled moom pickers ah kin right now see mah granpappy wif his jug in hand, 'n proud as a peacock, leadin us to his shack to see his pactly sto boughten amp.

Ya all notice ah's gittin a lil edgicated an called it an Amp 'nstead o an amplifier. Gess ahm jess gittin with the times.

Ole granpappy was always tryin to git the mose fer the littlist an when he heard bout puttin a dingy hoo on his present set up to git more output he got right to work.

Nevah let it be said that granpappy was behind the doah when the hoss got out... er... ah sumpin like that.

Well.... fer the next couple o weeks, Skunk River Holler was a buzzin lak a bees nest wif a bahr in it. There was copper tubin, wire an all sorts o junk all ovah the place. Ah saw granpappy makin a cawl by windin the copper tubin roun the toung o the plow.

One day granpappy went to town foah sum pahts an whilst thar he met up wif a feller who granpappy said

new all about amplifiers. He tole granpappy he should build hissself a chimley, that a chimley would direct the heat to whar yo want it. Granpappy said that fer a pig man he sho knew wat he was talkin about.

Wal now I know you all uses copper tubin fer cawls, 'n wire foah connectin pahts t'gither an chimleys to direct the heat from the toobs but ah'm a thinkin that granpappy done got confoosed someplace. Why?

Cause he come a runnin into the house like he was bein chased by the Sheriff an a hollerin "It works, an the output is doubled."

After we got him calmed down, he said, "Here taste it 'n see fer yer sef, it's the best yet an double the output." Taste it? ---Best yet? ---Double the output? ---Granpappy! Show us this Amp o youres.

Now granpappy's shack was jess out back a piece but the excitement o beholdin granpappys creation made it seem all of a mile away.

At last here we is an thar it...i..is. Wal ahl be a frogs uncle ah sees it... but ah done wanna believe it. Now ah knows fo sure granpappy got confoosed. He didna build a Amplifier.. he done built a still wif a beautiful copper cawl an a rite purty stone chimley.

Granmammy looked the whole sitiashun ovah an grumbled.. "Now that ya all got yosef a nice new chimley, ah spose yo all gonna be spectin Santy Claws to come down it wot a real amplifier."

You all ask me what I think of granpappys creation? Hmmm... ah's risgusted.....

## PROPAGATION FORMULA LOST (From GEARVAKf, Winter, 1985)

The FCC came clean today and admitted they had lost the original propagation formula in use from around 1905 until last summer.

"When we introduced the new formula last summer, the negative reaction was immediate and overwhelming," the FCC spokesperson said. "Band conditions have been lousy ever since. So we decided to bring back the old propagation and call it 'Propagation Classic,' but we've lost the formula!", the spokesperson continued.

"An effort was undertaken to re-invent the old 'classic' formula, but with disastrous results. In a secret test made on New Year's Eve (when everybody was getting drunk and away from their radios), the new classic formula caused 80 meters to fall clean through 160 meters into the broadcast band, and a small intense fire started on 40 that produced smoke damage up on 10 meters at the fourth harmonic.

"It was hoped that anyone operating on January 1 wrote off conditions to a bad hangover," the FCC spokesperson concluded. More on this exclusive GEARVAKf story as it develops. -N466



# WISCONSIN NETS ASSOCIATION

## WISCONSIN NETS

NET	WNA	FREQ	UTC	CDT	MANAGER
BWN	YES	3984	1100Z	0600	WD9IID
BEN	YES	3985	1700Z	1200	KA9RII
WSBN	YES	3985	2230Z	1730	WA9ZTY
WNN	YES	3723	2300Z	1800	N9DGL
WSSN	YES	3645	2330Z	1830	N9BDL
WIN-E	YES	3662	0000Z	1900	WB9ICH
WIN-L	YES	3662	0300	2200	KC9CJ
NWTN	YES	34/94	2330Z	1830	KD9VR
WCWTN	YES	31/91	2330Z	1830	NB9H
GR.BAY	NO	72/12	0145Z	2045	WB9NRK
			THU	WED	
WRN	NO	3625	2300Z	1800	K9UTQ
			RTTY Sun.	Tue. Thu.	

N9EYU and WB9USD passed Extra.

As a reminder, your Field Day entry must be postmarked by July 30th.

BWN	3984	6AM	WD9IID	1146-1232-26
BEN	3985	NOON	KA9RII	739-126-30
WSBN	3985	5:30PM	WA9ZTY	
WNN	3723	6PM	N9DGL	185-18-28
WCWTN	31/91	6PM	NB9H	539-40-30
WSSN	3645	630PM	N9BDL	204-57-30
NWTN	34/94	630PM	KD9VR	423-55-30
WIN-E	3662	7PM	WB9ICH	278-128-30
WIN-L	3662	10PM	KC9CJ	137-45-30

## APRIL TRAFFIC NET REPORTS - 1986

9RN CYCLE 4 REPORT APRIL 1986 X QNI 357 QTC 395 QTR 827  
IN 60 SESSIONS WISCONSIN PARTICIPATION NINETY TWO  
PERCENT STATIONS N9AUG W9CBE KC9CJ W9CXY K9GDF WB9ICH  
KA9DBP K9UTQ AND W9YCV 73 - W9JUI PEGGY NM

D9RN APR 86 238 MESSAGES 929 MINUTES 55 SESSIONS  
WISCONSIN 92 PERCENT STATIONS KA9RII W9CBE W9DDV N9BGE  
KC9CJ W9IEM 73 - DALE WA4JTE NM

CAND REPORT APRIL 86 X 589 MESSAGES IN 30 SESSIONS X  
D9RN REPRESENT 100 PERCENT X WISCONSIN STATIONS KA9RII  
W9CBE KC9CJ W9DDV N9BGE X 73 - JIM W5KLV NM

## SECTION MANAGER'S NOTE April 1986

Richard R. Regent K9GDF  
5003 South 26th Street  
Milwaukee WI 53221

Wisconsin Valley Radio Amateurs received 50-year ARRL  
Affiliated Club award.

WB9TFJ IS ON PACKET RADIO.

Silent Key W9YCV.

STM K9UTQ is a newly qualified Boy Scout Scoutmaster  
and is searching for Traffic Training Assistants  
(Amateurs with NCS or NM experience) for the Fond du  
Lac, Green Bay, La Crosse, and Oshkosh areas.

Fox Cities ARC has 17 Extras among its 71 members.

Ozaukee RC has awarded WB9ROR as its Ham of the Year.

ATC N9EYU helps fix RFI problems for others and up-  
graded to Extra.

July 1st is the start of my third year as Section  
Manager, thanks for your help.

Happy Fourth of July to all.

July 11 to 13 is Riponfest with KD9GD as Chairman for  
Amateur Radio Activities.

July 12, South Milwaukee ARC Swapfest at American  
Legion Post 434 in Oak Creek; license exams, talkin  
146.94 MHz.

Also July 12, Eau Claire ARC Hamfest at 4-H Building on  
Fairfax Street in Eau Claire; license exams, talkin  
146.52 MHz.

July 13, Milwaukee Circus Parade needs more communi-  
cators, contact EC WB9SMM.

## TRAFFIC TOPICS

Gene Santoski, K9UTQ, Section Traffic Mgr.  
1220 18th Avenue South  
Wisconsin Rapids, WI

It's time once again for me to include a column in  
BSSS.

First of all, I want to inform you that we have had two  
changes in Net Manager positions. As of May 1st, Lisa  
Harper, KA9RII has replaced John Glaeser, WB9ESM as  
Manager of the Badger Emergency Net. Replacing Lisa as  
NM of the West Central Wisconsin Traffic Net is Bill  
Maves, NB9H.

I wish them both the best of luck in their new endeav-  
ors and thank them for their willingness to serve the  
Wisconsin Section and the National Traffic System in  
that capacity.

Someone has proposed a new handling instruction, NYH,  
which would mean, "cancel message if unable to deliver  
as addressed, no need to service originator." Reaction  
to the proposal seems to be mostly negative among  
traffic handlers. The purpose of the proposal is to  
provide a simple way for those who operate fair sta-  
tions, where large volumes of traffic are originated.  
It makes unnecessary to send service messages to say  
traffic is undeliverable, because the originating sta-  
tion has no way to obtain any better address anyway.  
It could be compared to the Postal Service's third

class mail, which is not returned to the sender unless specially requested, the kind of mail that is mainly advertising material, popularly referred to as "junk mail."

The Postal Service authorities frown on their employees using the term "junk mail." People who pay postage and entrust their mail to the post office are entitled to have their material given the careful treatment due to anything that postal patrons mail, employees are told. Amateurs who handle traffic feel the same about any message that the Amateur Radio Service handles for the public. Regardless of how many we handle, each one is important. Even from exhibit stations, for several reasons. To be effective as publicity for Amateur Radio, messages must be delivered promptly and accurately. True, many people who file messages at an exhibit don't expect them to be delivered, but that only makes the impact greater when they find out that their message was delivered promptly, accurately, competently.

Second, just as important as public relations aspect is the fact that handling large volumes of traffic is important for training and keeping the system healthy. Giving every message first-class treatment is good practice to prepare for the time when messages might be much more important than fair traffic, and perhaps even someone's life might depend on prompt delivery of a message that requires a bit of detective work to find the addressee.

A third objection to HXH is not to this handling instruction in particular, but to handling instructions in general, some traffic handlers think they should be eliminated as superfluous, whether because the few times one really needs to say something covered by a handling instruction, one can easily do it some other way, or because even when they are used amateurs seldom do what they say.

It doesn't matter how important or unimportant a message is. Once it enters the system it should either be cleared by delivery, or be cancelled by the ORIGINATING STATION only after deciding that further attempts at delivery are useless.

What do you think?

There has been some rather disturbing attempts by the FCC to abolish communications by Amateurs that serve agencies such as the National Weather Service and the Red Cross as well as various fund-raising activities such as walk-a-thons, bike-a-thons and the like.

Relative to this, the future of our own Badger Weather Net has been questioned. Well, let me just state that I have discussed the matter both with our Section Manager Richard Regent, K9GDF as well as our Central Division Director Ed Metzger, W9PRN. We have all agreed that we should keep on providing the service that we have to the NWS by means of the BWN - at least until further clarification of the question is presented by the FCC. In other words, until further notice, the Badger Weather Net will continue to function as it has in the past by providing invaluable weather information from around the state to the Milwaukee office of NWS.

By the time you read this, I will probably be on my way to the East Coast. I am taking my family on an extended vacation trip to Florida and up the Eastern Sea-

board. The trip will, of course, include a visit to ARRL headquarters in Newington, Ct. Needless to say, I am looking forward to that. I do hope I have an opportunity to meet with several individuals regarding the National Traffic System while at HQ.

In closing, I just want to say that activity seems to be on the upswing on our CW nets which makes me very happy!

I do hope that this trend continues.

Also, I want to thank you all for your dedication and efforts in keeping the National Traffic System alive and well in the Wisconsin Section. My hat is off to all of you.

Till next time, 73, Gene, K9UTQ

#### WEST CENTRAL WISCONSIN TRAFFIC NET

-----  
Lisa Harper, KA9RII, Net Manager  
514 Fall Street  
Eau Claire WI 54703  
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Well, the first of May is here, and it's time to put on another hat. Today, I'll assume the task of Net Manager for the Badger Emergency Net and pass on the NM responsibilities of the WCWTN to NB9H, Bill Maves.

I'm looking forward to working more closely with the BEN, and want to thank John, WB9ESM, for the fantastic job he's done as NM for the past several years. Under his leadership the net has flourished, and I only hope I can adequately fill his shoes. Enjoy your retirement, John, and don't be a stranger on the nets!

The members of the WCWTN have been the greatest since I took over as NM last November. The net controls are outstanding; always on their appointed days, handling the net in a professional manner. In the last 6 months, we've welcomed 5 new members and 3 new net controls. The net roster now totals 41.

NB9H is no stranger to NM responsibilities. In the past, he served the WCWTN well as NM under his old call, KC9VM. The best of luck to you, Bill, in your job. Together with your DEC position, you're carrying quite a load!

I want to thank all the net members for making the last six months an enjoyable experience. You're a great group. See you on the nets!

-----  
A Frenchman was relating his experiences in studying the English language. He said, "When I discovered that if I was quick, I was fast; that if I was tied up I was fast; that if I spent too freely, I was fast; and that not to eat was to fast, I was discouraged. But, when I came across the sentence, 'The first one won one one-dollar bill', I gave up."

-----ARNS

DON'T FORGET FIELD DAY JUNE 28-29





# THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association (W.A.P.R.)  
P.O. Box 1215  
Fond Du Lac, WI 54935

## \*\*\* REMINDER \*\*\*

The next W.A.P.R. meeting will be held at the July 12th South Milwaukee Swapfest at Oak Creek.

The Meeting will be held in the Clubhouse, on the grounds, at 1:00 P.M. Bring your band-plans. See you there.

The following items are from ARRL Gateway  
May 2, 1986

## NOTICE TO ALL TAPR TNC/CLONE HF PACKET USERS

"Recently Eric Gustafson, W7CL, and I reexamined the 300-baud HF modem demodulator circuit and concluded that the main reason people have difficulty tuning in HF packet with the standard 300-baud modem is that tuning is too critical. We have come up with what we think should be very close to the optimal performance of the 2211 demodulator circuit.

"To change the standard 300-bauds demodulator circuit to this improved version, locate header U34 on TNC 1 and U19 on TNC 2. The standard 300 bauds version of this header contains a 226-kohm resistor and a 510-kohm resistor. These should be replaced by 180 kohm and 750 kohm respectively. The result of these changes is that the tuning range should open up from about 10 Hz to around 50 Hz. Thus, you should experience reliable demodulation when the frequency tuned is within plus or minus 20 Hz or so of the true signal frequency.

"We urge all HF packeteers using TAPR TNCs (original or clone boards) to make these changes as soon as possible. We also remind everyone that HF is becoming alarmingly crowded, and that unless sensible operating practice is followed, the channel will be useless. Some suggestions concerning HF operation are:

1. Try to keep all packets below 80 characters in length.
2. Set MAXFRAME to 1. This will minimize transmission time.
3. Avoid multiple connections and digipeated packet operation.
4. QSY away from the standard calling frequencies as soon as possible.
5. Set FRACK to a sensibly long value.

"We hope these modifications improve matters on HF, and would VERY GREATLY appreciate hearing from any of you who make this modification and are able to compare the new behavior to the previous behavior."

From Dan Morrison, KV7B, and  
Eric Gustafson, W7CL

## REVIEW OF THE AEA HF PACKET MODEM MODEL PM-1

"If you are like me, you have tried your TNC on HF 300-baud packet with limited success. I even tried using the recommended filter for 300-baud operation and found that the situation was improved but it still took a rock-solid signal to be able to exchange packets.

"Advanced Electronic Applications (AEA) of Lynnwood, WA, has just introduced their model PM-1 Packet Modem. It is a modem that goes between the HF rig and any packet TNC, and requires no modifications of the TNC. Basically it has two separate built in demodulators with each featuring channel filtering and AM detection for maximum sensitivity and selectivity under noisy HF band conditions. The HF receiver tuning is assisted by a front panel bar graph. The PM-1 also has a built in Bell type 202 modem which allows for direct connection to the audio input and output of the TNC. The HF transmit tones are generated by a built in AFSK generator which allow for direct connection to the microphone jack of the HF SSB rig.

"I was able to purchase a PM-1 locally (s/n 46) to try its operation on HF with my TAPR TNC 2. The installation was quite easy, I soldered a few connectors to the cables provided and I was all set. I don't quite know how to put into words the surprise I experienced with the improvement, but the first BBS signal I found in 20 meters was WORLI. I connected to Hank's BBS and operated it just as easily as I operate the local BBSs on 2 meters. Needless to say I was more than pleased with its operation, for I have never been able to maintain a solid connect on HF with any station, let alone a BBS, without a lot of effort and retries. Now that I have had a few days of operation with the PM-1, I find I am able maintain packet connects with a minimum of retries with signals that are fading, weak, and noisy. The 'copyability' is just as good as with the best of the RTTY Terminal units I have used. The PM-1 has opened a whole new world of pleasurable HF packet operation that I have never known before with just the PLL type TNC detection.

"If you have or planning HF packet operation, I strongly recommend you look into the AEA PM-1 for use with your TNC. I understand that the AEA HPM-64 modem made for the Pakratt PK-64 performs equally as well."

From KORZ

## AEA UNVEILS PK-232 AT DAYTON

"AEA's PK-232 and UDC-232 all-mode controllers were demonstrated at the Dayton Hamvention. Packaged in a familiar box like their CP-1/CP-100s, the PK-232 is functional equivalent of AEA's PK-64, but has its own Z80 processor and RAM (the PK-64 uses C 64's 6502 and memory) and presents the conventional RS-232-C interface to any computer or dumb terminal. The PK-232 provides Morse, Baudot, ASCII, AMTOR and packet. The UDC-232 (Universal Data Controller) is the 'digital-only' block of the PK-232, without the analog TU/modem section, for users who already have a satisfactory TU

such as the CP-1/CP-100s or any other existing good-quality interface. The Morse, Baudot and ASCII code and routines are basically derived from AEA's well-proven MBA-TDR programs. However, the AMTOR routines are based on the excellent 'Z-AMTOR' code written for the Z80 by Paul Newland, AD7I. You place the PK-232 wherever your telephone modem has been and use whatever terminal program you use now.

"An excellent VHF/HF modem (TU) is built in, nothing else required. A modem bypass connector permits use of external higher-speed modems. The front panel is full of LEDs indicating modes and status, including those found on the TNC 2. Front-panel RADIO-1/RADIO-2 switch selects either of two I/O rear-panel cable connectors minimizing cable swapping between HF and VHF radios. TAPR's TNC 2 code is the basis for the PK-232's packet routines, with a couple of very interesting additions by AEA's full-time programmer Steve Stuart, N6IA. The full TNC 2 command/param structure is included. The PK-232's new command/param 'MBX' is dandy. When the 'MBX' [PBBS CALLSIGN] command is given, the system will display/print only the information packets decoded from that PBBS, in correct sequence, without repeats and without headers. So, when one of the other guys on channel is 'downloading' a 17 kbyte Gateway or other long file, you can copy/save/print the same file without all the extra frames you used to get and thus avoid having to manually edit out the trash or pull the same file down yourself in the CONVERSE mode.

"KI4XO was operating a mobile-mounted PBBS with MBL code and the PK-232 was used with a Wyse-50 dumb terminal and an ICOM 24T for continuous on-air demo. HF modes were demonstrated live with an ICOM 735 on 20 meters.

"AEA's president Mike Lamb, N7ML, says that the PK-232 will be shipped to dealers mid-summer with 'amateur' list price between \$300-\$350. The price on the modem less UDC version has not been set yet, but should be substantially lower than the modem-included PK-232."

From W2JUP

#### HEATH TNC STATUS INDICATOR

A couple of months ago, the Heath company introduced a 'status indicator' for their version of the TAPR TNC-1. Though introduced with almost no fanfare, the unit is a very enhancement to the TNC-1.

The unit plugs into the expansion connector J1 on the back of the TNC and derives its power from the TNC. Since the Heath TNC is a TAPR TNC-1 clone, the Status Indicator should work with the original TAPR board as well as with other clones.

The status indicator consists of 8 LEDs (2 green, 4 yellow and 2 red) along with a small audible alarm circuit all mounted in a small case that matches the TNC.

The audible alarm is the nicest feature of the status indicator. Whenever someone connects with you the alarm sounds for a short while to let you know you are connected. The alarm is loud enough to be heard a reasonable distance away allowing the operator to leave the TNC on and concentrate on things other than the screen.

Two of the LEDs are used to indicate whether the TNC is

in the COMMAND or CONVERSE mode. A green LED labeled CMD: is lit when the TNC is in command mode and yellow LED indicates CONVERSE mode status. Another pair of LEDs indicates the connect status of the TNC. A red LED indicates Connect and a green LED indicates Disconnect.

Three other LEDs indicate CONNECT ATTEMPT, DISCONNECT IN PROGRESS and BUFFER. The first two require no explanation. BUFFER indicates a packet is backed up in the TNC waiting to be sent. This indicator is extremely useful as it indicates when the TNC is delayed because of channel activity.

The final red LED labeled FRMR indicates that the TNC has received an invalid frame, and that a frame reject packet has been sent.

The status indicator has been in use here at AABV for several months and has proved to be well worth the price of \$24.95. The Heath stock number is HDA-4040-1. Shipping weight is 2 lbs.

From AABV

\*\*\* CONNECTED to N9IF

From: W9TD

To: ALL

Entered: 20:00 On 8/10/85

Re: The considerate operator's guide to packet radio.

- 1) No CW ID. It is not required by the FCC and only ties up the channel.
- 2) No Beacons unless you are at your terminal and ready for a QSO or you have a service to offer such as a BBS or Gateway, etc. We don't need Beacons like 'I'm not home but my computer is'.
- 3) Set Beacon intervals to 20 minutes or more.
- 4) Don't beacon through wide-area coverage digipeaters. It will only cause collisions with people who can't hear you.
- 5) A good set of standard TAPR TNC parameter settings are:

TXDELAY=4 - AXDELAY=0 - DWAIT=2  
 AXHANG=0 - RETRY=3 - FRACK minimum=4  
 Computer DWAIT=6 and MAXFRAME=2

\*\*\* DISCONNECTED

#### GEARVAK TESTING VOICE PACKET RADIO

The GEARVAK Technical Experimentations Committee (GEARTECH) has just released the results of its first tests of the new voice encoded packet system developed at the GEARVAK Scientific Laboratories. According to GEARTECH Chairman, Dr. Avruell U. Harnishe, instead of using a keyboard, VoicePak, as it is called, "uses direct digital conversion of the operator's voice in the transmitted packet." Although the system seems to work well, Dr. Harnishe said that "no method of receiving the voice encoded packet has as yet been found."

---400 Harry

## 1986 WISCONSIN QSO PARTY SUMMARY - WISCONSIN STATIONS

CALL	COUNTY	QSO CW	POINTS PHN	MULT	FINAL SCORE	CLUB AFFILIATION
MULTI OPERATOR - MULTI TRANSMITTER						
K9EC *	EAU CLAIRE	490	877	119	162673	GREATER RICE LAKE CONTEST CLUB
N9EZ/M	20 WORKED FROM	620	274	68	70792	KETTLE MORaine RADIO AMATEURS
N9DBV/M	2 WORKED FROM	0	316	79	25964	KETTLE MORaine RADIO AMATEURS
MULTI OPERATOR - SINGLE TRANSMITTER						
KA9LDE *	BROWN	154	170	73	23652	GREEN BAY MIKE & KEY CLUB
WD9ABE/M	6 WORKED FROM	0	114	40	7560	GREATER RICE LAKE CONTEST CLUB
KD9QD/M	3 WORKED FROM	10	74	21	3264	GREATER RICE LAKE CONTEST CLUB
SINGLE OPERATOR - NOVICE/TECHNICIAN						
KA9EKR *	JEFFERSON	144	0	48	6912	WATERTOWN AMATEUR RADIO CLUB
WB9WRW/M	6 WORKED FROM	0	107	9	3963	KETTLE MORaine RADIO AMATEURS
KA9RFR/M	2 WORKED FROM	0	61	9	1549	
WA9KEC	WAUKESHA	0	86	14	1204	WEST ALLIS RADIO AMATEUR CLUB
W9YT	DANE	44	0	16	704	BADGER AMATEUR RADIO SOCIETY
KA9SPD	WAUKESHA	0	44	12	528	KETTLE MORaine RADIO AMATEURS
N9EFX	DODGE	0	40	10	400	WATERTOWN AMATEUR RADIO CLUB
KA9SMD	WAUKESHA	0	32	11	352	KETTLE MORaine RADIO AMATEURS
N9END	MILWAUKEE	2	39	8	328	KETTLE MORaine RADIO AMATEURS
KA9UPZ	DANE	32	0	10	320	
SINGLE OPERATOR - SINGLE TRANSMITTER						
AC9C/9 **	SAWYER	364	402	114	87824	GREATER RICE LAKE CONTEST CLUB
NA9D/M *	SAWYER	372	384	114	86684	GREATER RICE LAKE CONTEST CLUB
KB9S *	PEPIN	380	312	107	74044	GREATER RICE LAKE CONTEST CLUB
W9XT *		378	259	102	64974	KETTLE MORaine RADIO AMATEURS
K9GDF *	MILWAUKEE	400	192	83	49136	W/K ARC OF GREATER MILWAUKEE
KA9RWU *	PORTAGE	0	441	101	44541	
N9DIH *	MILWAUKEE	230	223	84	38052	W/K ARC OF GREATER MILWAUKEE
W9WAQ *	DODGE	350	119	77	36113	WATERTOWN AMATEUR RADIO CLUB
K090 *	SHEBOYGAN	256	199	79	35945	SHEBOYGAN CO. AMATEUR RADIO CLUB
KC9NH *	WINNEBAGO	0	300	112	33600	OSHKOSH AMATEUR RADIO CLUB
K9L6U	CALUMET	344	65	78	31902	CALUMET ARES
NI9Z	SHEBOYGAN	356	104	69	31740	SHEBOYGAN CO. AMATEUR RADIO CLUB
WA1UJU/9	WAUKESHA	224	185	76	31084	KETTLE MORaine RADIO AMATEURS
K9KR	RACINE	0	358	85	30430	WEST ALLIS RADIO AMATEUR CLUB
WB9ICH	WAUPACA	298	100	75	29850	
WB9SBD	VERNON	260	114	75	28050	ARC OF CENTRAL WISCONSIN
WA9YSD	MILWAUKEE	398	23	65	27365	WEST ALLIS RADIO AMATEUR CLUB
N9AUG	GRANT	330	53	67	25661	
N9AW	MILWAUKEE	192	174	69	25254	W/K ARC OF GREATER MILWAUKEE
W9WI/M	8 WORKED FROM	288	67	59	24945	GREATER RICE LAKE CONTEST CLUB
AJ9U	MILWAUKEE	214	150	62	22568	W/K ARC OF GREATER MILWAUKEE
NF9V	JEFFERSON	356	12	59	21712	WATERTOWN AMATEUR RADIO CLUB
K9WTF/M	1 WORKED FROM	0	305	67	20935	WEST ALLIS RADIO AMATEUR CLUB
WB9TNF	MILWAUKEE	0	279	74	20646	W/K ARC OF GREATER MILWAUKEE
KY9P	WASHINGTON	310	26	58	19498	OSHAUKEE RADIO CLUB
WA4TWB	OSHAUKEE	338	0	57	19266	
K9IAC	MILWAUKEE	0	259	74	19166	WEST ALLIS RADIO AMATEUR CLUB
WB9HRO	DANE	268	28	60	17760	FOUR LAKES AMATEUR RADIO CLUB
K9DZG/M	6 WORKED FROM	264	18	47	16254	YELLOW THUNDER AMATEUR RADIO CLUB
N9HR	JEFFERSON	158	130	56	16128	WATERTOWN AMATEUR RADIO CLUB
W9RF	SHEBOYGAN	282	0	56	15792	SHEBOYGAN CO. AMATEUR RADIO CLUB
AB9L/M	9 WORKED FROM	0	239	46	15494	GREATER RICE LAKE CONTEST CLUB
N9KS	WAUKESHA	64	206	56	15120	KETTLE MORaine RADIO AMATEURS
KD9TP	WINNEBAGO	0	186	80	14880	OSHKOSH AMATEUR RADIO CLUB
AE9K	WAUKESHA	278	6	50	14200	W/K ARC OF GREATER MILWAUKEE
K9OSC	WAUKESHA	226	53	50	13950	KETTLE MORaine RADIO AMATEURS

\* CERTIFICATE \*\* PLAQUE

1986 WISCONSIN QSO PARTY SUMMARY - WISCONSIN STATIONS						
CALL	COUNTY	QSO POINTS		MULT	FINAL SCORE	CLUB AFFILIATION
		CW	PHN			
K89W	POLK	200	24	62	13888	GREATER RICE LAKE CONTEST CLUB
K9GSH	WAUKESHA	0	192	61	11712	KETTLE MORaine RADIO AMATEURS
WB9GQJ/M	8 WORKED FROM	146	64	36	11560	GREATER RICE LAKE CONTEST CLUB
NF9R	SHEBOYGAN	76	119	56	10920	SHEBOYGAN CO. AMATEUR RADIO CLUB
NOAKC/M	7 WORKED FROM	0	154	48	10892	GREATER RICE LAKE CONTEST CLUB
NB9H	DUNN	72	121	55	10615	GREATER RICE LAKE CONTEST CLUB
KD9J	ROCK	208	0	51	10608	
K9BED	MILWAUKEE	208	5	48	10224	
N9EAJ	JEFFERSON	150	44	50	9700	WATERTOWN AMATEUR RADIO CLUB
WB9LLW	WAUKESHA	0	157	58	9106	KETTLE MORaine RADIO AMATEURS
KV9V	SHEBOYGAN	40	134	52	9048	SHEBOYGAN CO. AMATEUR RADIO CLUB
NOBMP/M	5 WORKED FROM	48	104	43	9036	GREATER RICE LAKE CONTEST CLUB
WB9IXS	WAUKESHA	76	82	54	8532	KETTLE MORaine RADIO AMATEURS
KD9FC/M	7 WORKED FROM	0	143	35	8505	GREATER RICE LAKE CONTEST CLUB
KD9ET	MILWAUKEE	86	104	44	8360	W/K ARC OF GREATER MILWAUKEE
W9CHD	LINCOLN	166	21	44	8228	
WB9MSM	JEFFERSON	0	152	54	8208	WATERTOWN AMATEUR RADIO CLUB
WB9TOC/M	7 WORKED FROM	0	142	33	8186	GREATER RICE LAKE CONTEST CLUB
KB9DZ	WAUKESHA	0	169	47	7943	KETTLE MORaine RADIO AMATEURS
WB9NRK	BROWN	0	141	55	7755	GREEN BAY MIKE & KEY CLUB
W9UB	WAUKESHA	0	135	55	7425	
WA9USD	WASHINGTON	122	51	42	7266	OZAUKEE RADIO CLUB
N9BDN	JUNEAU	46	89	51	6885	ARC OF CENTRAL WISCONSIN
NC9G	PRICE	0	126	53	6678	
WA9UJK	MILWAUKEE	16	109	52	6500	OZAUKEE RADIO CLUB
K9VSO	DANE	44	85	48	6192	
K9JIG	EAU CLAIRE	0	116	50	5800	GREATER RICE LAKE CONTEST CLUB
KE9C	JEFFERSON	0	118	49	5782	WATERTOWN AMATEUR RADIO CLUB
NA9M	DANE	94	42	42	5712	
W9YCV	MILWAUKEE	14	99	49	5537	WEST ALLIS RADIO AMATEUR CLUB
K9EP		0	116	46	5336	BELOIT ARS
W9RTP/M	4 WORKED FROM	0	95	35	5325	
WB9LSR	WAUKESHA	0	125	41	5125	KETTLE MORaine RADIO AMATEURS
WA9KCU	DODGE	0	103	42	4326	WATERTOWN AMATEUR RADIO CLUB
KA9BHL	LINCOLN	0	93	42	3906	NORTHWOODS AMATEUR RADIO CLUB
NF9Q	SHEBOYGAN	46	61	36	3852	SHEBOYGAN CO. AMATEUR RADIO CLUB
KD9GS	WAUKESHA	60	57	32	3744	KETTLE MORaine RADIO AMATEURS
WB9SAU	OUTAGAMIE	0	94	39	3666	FOX VALLEY AMATEUR RADIO CLUB
N9AU	MILWAUKEE	72	27	34	3366	WEST ALLIS RADIO AMATEUR CLUB
N9BHQ	MONROE	0	85	39	3315	ARC OF CENTRAL WISCONSIN
KW9E	MILWAUKEE	76	22	32	3136	KETTLE MORaine RADIO AMATEURS
KC9BY	WAUKESHA	0	101	30	3030	
W9BTM	SHEBOYGAN	0	69	40	2760	
W9CBE	DANE	84	0	28	2352	
N9EEE/M	1 WORKED FROM	0	122	13	2086	KETTLE MORaine RADIO AMATEURS
NI9U/M	1 WORKED FROM	44	31	19	1925	KETTLE MORaine RADIO AMATEURS
W9FJE	MILWAUKEE	0	66	29	1914	WEST ALLIS RADIO AMATEUR CLUB
KA9GPH	DODGE	0	56	27	1512	WATERTOWN AMATEUR RADIO CLUB
N9DHT	EAU CLAIRE	0	41	24	984	EAU CLAIRE AMATEUR RADIO CLUB
W9DMI	MILWAUKEE	62	8	14	980	W/K ARC OF GREATER MILWAUKEE
N9CRD	WINNEBAGO	0	31	23	713	OSHKOSH AMATEUR RADIO CLUB
W9IBL	JEFFERSON	0	36	19	684	WATERTOWN AMATEUR RADIO CLUB
W9DDV	SHEBOYGAN	0	28	20	560	
WA9POV	MILWAUKEE	0	33	12	396	WEST ALLIS RADIO AMATEUR CLUB
KA9ARM	WAUKESHA	0	26	14	364	KETTLE MORaine RADIO AMATEURS
N9DIJ	MILWAUKEE	0	51	7	357	W/K ARC OF GREATER MILWAUKEE
KC9CI	WASHINGTON	0	13	12	156	KETTLE MORaine RADIO AMATEURS
KA9CSC	OZAUKEE	0	9	7	63	OZAUKEE RADIO CLUB

## 1986 WIS. QSO PARTY SUMMARY - NON WISCONSIN STATIONS

CALL	STATE	QSO CW	POINTS PHN	WIS. COUNTIES	FINAL SCORE
K4FHD *	AL	92	0	26	2392
WA4VEK	AL	0	1	1	1
WA7NWL *	AZ	4	7	7	77
AK7J	AZ	6	2	4	32
N6MLW *	CA	14	1	4	60
WB8ZRL/O *	CO	112	13	31	3875
W01ZV	CO	54	2	22	1232
K3JL *	DE	100	34	26	3484
WK4F *	FL	0	10	8	80
WA4KC *	GA	40	3	13	559
N00Z *	IA	122	0	22	2684
KU7Y *	ID	98	0	25	2450
K9KM *	IL	72	51	30	3690
AH2U	IL	20	21	13	533
AJ9C *	IN	0	96	42	4032
N0FMR *	KS	150	15	31	5115
N0CLV	KS	46	7	21	1113
K2UPD *	KY	60	37	21	2037
KA1CLV *	MA	10	0	4	40
W3GG *	MD	52	0	15	780
KY1K *	ME	118	2	26	3120
NK8Q *	MI	116	96	37	7844
W8QM	MI	94	70	38	6232
K8DT	MI	74	49	28	3444
KY9F/8	MI	0	52	22	1144
K8NDU	MI	0	35	24	840
WA0QIT *	MN	132	118	49	12250
W8OVKI *	ND	0	64	23	1472
W0LL *	NE	0	19	12	228
K8IPZ *	NH	16	0	7	112
A19X *	NM	166	55	36	7956
VE1BEP *	NS	48	16	20	1280
K2POF *	NY	98	26	31	3844
N2RT	NY	132	8	27	3780
NN2U	NY	118	0	30	3540
W2BUN	NY	92	0	23	2116
K8CW *	OH	164	49	37	7881
K8ATQ	OH	122	34	29	4524
W8IQ	OH	92	6	21	2058
VE3KK *	ONT	124	0	31	3844
W3H0H *	PA	184	37	38	8398
N3DLJ	PA	124	72	35	6860
WA3YON	PA	78	38	24	2784
WA3UNX	PA	106	7	22	2486
K3BIE	PA	62	43	23	2415
K3YTL	PA	82	0	19	1558
K3SO	PA	50	17	21	1407
K3TX	PA	58	2	19	1140
WB3FAA	PA	44	6	17	850
WB3IWZ	PA	0	44	17	748
WB3FYT	PA	0	35	17	595
WA3JXW	PA	10	15	12	300
KA3HNF	PA	0	23	11	253
WB3GOV	PA	0	17	11	187
W3UIU	PA	20	0	8	160
N3CIB	PA	4	0	2	8
W3DCG	PA	0	1	1	1
N5AFV *	TX	34	10	12	528
W5NR	TX	26	0	11	286
K4GKD *	VA	162	65	34	7718
W31JT *	WV	0	23	12	276

\* CERTIFICATE

## 1986 WISCONSIN QSO PARTY CLUB AGGREGATE SUMMARY

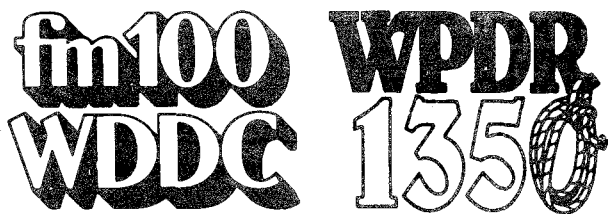
PLACE	CLUB NAME	SCORE
1	GREATER RICE LAKE CONTEST CLUB	540970
2	KETTLE MORRAINE RADIO AMATEURS	280884
3	W/K ARC OF GREATER MILWAUKEE	179553
4	WATERTOWN AMATEUR RADIO CLUB	111477
5	WEST ALLIS RADIO AMATEUR CLUB	110313
6	SHEBOYGAN CO. AMATEUR RADIO CLUB	107297
7	OSHKOSH AMATEUR RADIO CLUB	49193
8	ARC OF CENTRAL WISCONSIN	38250
9	OZAUKEE RADIO CLUB	33317
10	CALUMET ARES	31902
11	GREEN BAY MIKE & KEY CLUB	31407
12	FOUR LAKES AMATEUR RADIO CLUB	17760
13	YELLOW THUNDER AMATEUR RADIO CLUB	16254
14	BELDIT ARES	5336
15	NORTHWOODS AMATEUR RADIO CLUB	3906
16	FOX VALLEY AMATEUR RADIO CLUB	3666
17	EAU CLAIRE AMATEUR RADIO CLUB	984
18	BADGER AMATEUR RADIO SOCIETY	704

SOAPBOX \* SOAPBOX \* SOAPBOX \* SOAPBOX \* SOAPBOX

Thank you (Wisconsin Hams) for the high level of activity and the prompt, 50% reply to QSL cards sent following the contest - W8IQ. Enjoyed ur party. CU next year - W8QM. I knew the contest was starting to wind down when I started calling "CU Field Day"! See everyone next year - W8?MSM. Lost voice and ambition but had a good time trying. Thanks for sponsoring it - KC9NH. Another fine contest. Lots of QSOs on 40 this year. Would like to see mobile dupe sheets required only if 15 or more made per county - WB9TOC. FB contest again. Might want to consider having dupe sheets for mobiles only if they have 20 or more QSOs from a county on a band - N0BMP/M. Enjoyed short contest. Mobile stations did a fine job - W01ZV. I was doing OK on 40... my low power wasn't able to get through on 75. Stations seemed to be bunched up together in a very crowded part of the band - W31JT. Propagation poor this year but enjoyed QSO Party as usual. Tnx - VE1BEP. Great QSO Party! Need more band space on 75 in evening. The last 22 counties I needed kept hopping around... get them next year. Maybe try what we do in Michigan QSO Party - have a designated mobile to be worth 5 pts/county, any mode, any band - NK8Q. Two things I like about the Wisconsin QSO Party: it comes after football season and everyone has time to chat before, during and after. Friendly, competitive spirit. Sheboygan Co. ARC is going ALL OUT for club competition next year! - K09Q. Always good to operate in the Wisconsin Test - K2POF. My first Wisconsin QSO Party operating QRP! Thanks for a great contest - KB1PZ. Best state QSO I've been involved with. See you next year! - AJ9C. It was good contacting a few of my friends back home - N6MLW/N8BYK/W09BCM. I really had a good time and met some nice folks. Please ask participants not to over-abbreviate counties - WA1JVV. Great contest! Only gripe was not enough counties on 40 CW (it's where my antenna has me stuck). Special thanks to N9EZ for his mobile efforts - NN2U. Enjoyed contest - much activity for an hour or so - but where was everyone on Saturday? - W5NR. Hope you enjoyed participation from Penna - a case of beer is riding on the outcome of competition between Nittany ARC of State College and Murgas ARC of Wilkes-Barre. Hope you all join us in PA test in October! I'll even offer a plaque to top Wisconsin station (Single OP) if there are 10 or more entries. Let me know - W3H0H. Why not a separate CW category? - W9WAO. My only antenna is 20 meter dipole at 10 ft. CU next year with more - KA1CLV.



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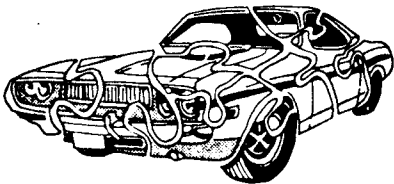
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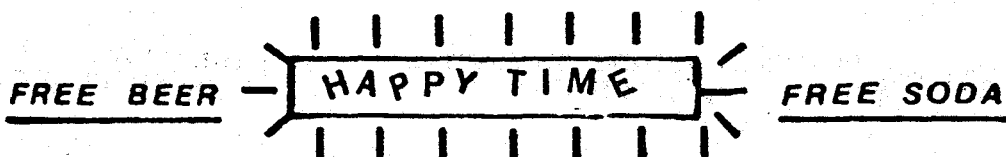
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**Tickets \$3.00**

PACKET: MEETING

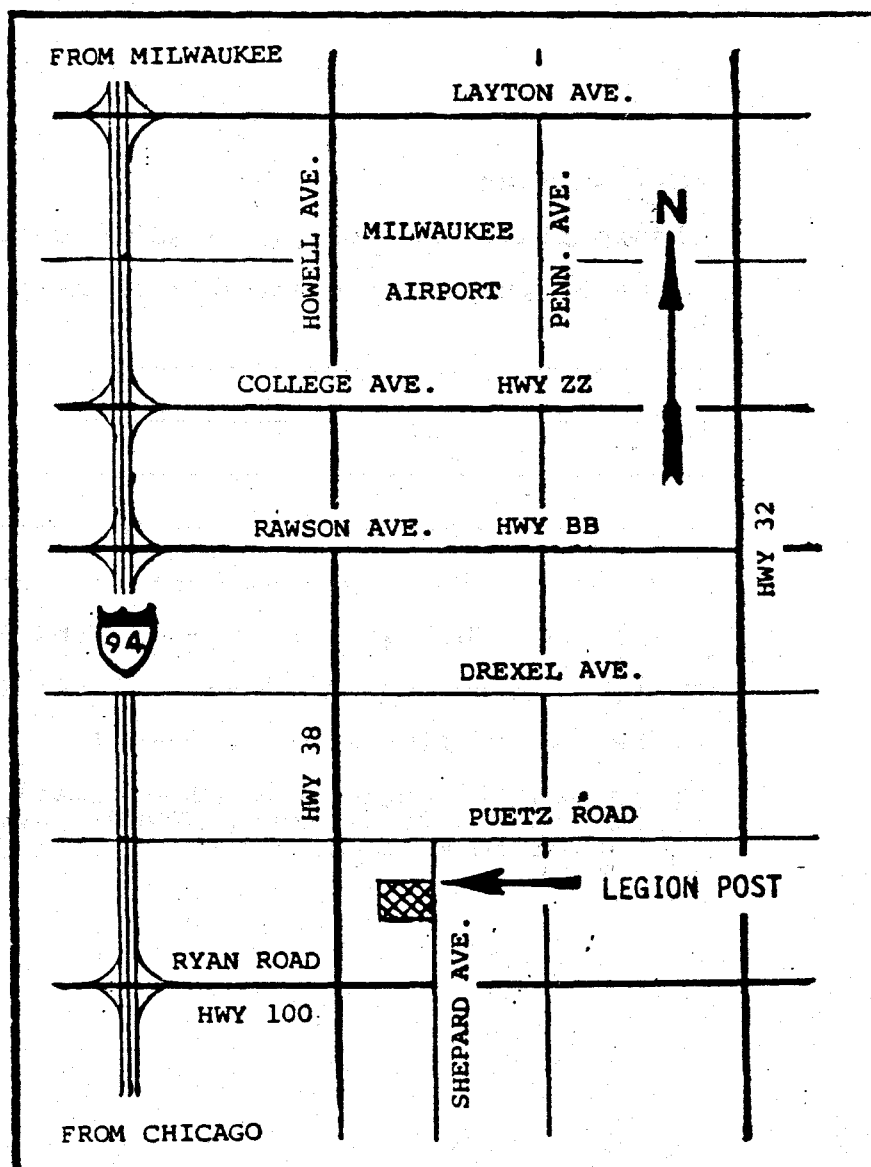
**FIRST PRIZE \$100**  
**SECOND PRIZE \$50**

**PLUS**  
**HOURLY PRIZES**

WISCONSIN MEETING  
SOCIETY OF MIDWEST  
CONTESTERS

**Talk-in 146.94**  
**WA9TXE/9**

AMATEUR RADIO EXAMS  
MILWAUKEE VOLUNTEER  
CORE GROUP



BADGER STATE SMOKE SIGNALS  
Jim Romelfanger, K9ZZ, Editor  
(see page two for exchange address)

BULK RATE  
U.S. POSTAGE  
PAID  
PERMIT # 265  
PORTAGE WI 53901

return address:  
Kenneth A. Ebnetter, K9EN  
822 Wauona Trail  
Portage, Wisconsin 53901

Mood music comes into my office,  
And follows me through elevators and halls  
Often putting me in the mood  
To rip speakers out of the walls.  
--Edward F. Dempsey.

DATED MATERIAL -- PLEASE DON'T DELAY

FORWARDING AND RETURN POSTAGE GUARANTEED  
AND ADDRESS CORRECTION REQUESTED

THIRD CLASS MAIL

#### WANT AD FORM

Please place the following ad in Badger State Smoke Signals.  
Count 39 letters per line, including spaces and punctuation.

-----  
-----  
-----  
-----  
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Please run this ad for ----- month(s).

Multiply ----- months X ----- lines at

50 cents per line = \$-----.

My payment is enclosed. Please mail this form with your  
remittance to Jim Decker, WB9UQT, Keeper of the Funds, P.O. Box  
337, Baraboo WI 53913-0337. --Thank you!